

208. On the motion of Dr. Hector, it was unanimously resolved,—LX. That the evidence before the Conference shows the paramount importance of obtaining the co-operation of Tasmania in Australian meteorology; and the Conference therefore requests Mr. Ellery, the representative of Victoria, to continue the steps he has already taken to secure the practical co-operation of that Government as soon as possible.

Weather Maps.

209. The method of securing perfect uniformity in the maps was discussed and agreed upon.

Rain-Gauges.

210. Mr. Russell stated that it had come to his knowledge that rain-gauges were offered for sale, and were actually sold, which had an error of as much as 10 per cent.; and that he thought it desirable to point out to all persons interested in rain measurement the necessity for having accurate means of measurement. On his motion it was resolved,—

211. LXI. That this Conference, in view of the importance of and general interest taken in rain observations, recommend private observers to use none but certified eight-inch rain-gauges; and that each member of the Conference undertakes to certify to the accuracy of rain-gauges gratis.

Sliding Scale for reducing Barometrical Observations.

212. Mr. Russell stated that during the past few months he had devised a sliding scale for reducing barometrical observations for weather purposes, a copy of which he submitted. In his experience it had to a great extent obviated the risk of error in reduction. Its use could be taken up immediately, only a few minutes' instruction being required even by a person who had no knowledge of the ordinary forms of computation. A calculation had to be made for each station, and from its result a curve was plotted: this curve varied with the altitude.

213. Mr. Ellery suggested that a series of diagrams might be constructed which should serve for all altitudes.

214. Mr. Russell agreed that the suggestion was practicable, but had found that, for actual use, it was best to compute for each station and plot it with its name upon the scale, so that it could be easily seen.

215. Mr. Ellery inquired whether the index error of each barometer was indicated upon the scale.

216. Mr. Russell replied that he had introduced that element, so that the diagram gave the reading corrected for index temperature and altitude.

217. Mr. Todd stated that he had for each station a small card, upon which all the corrections were included for index error, altitude, and reduction to 32°

218. Mr. Russell said that in constructing the diagrams computations were made for 40° and 80°

219. Mr. Ellery said that in his opinion the method would be found as valuable as Mr. Russell's hygrometric sheet had been; and the other members of the Conference agreed in approving of Mr. Russell's plan.

Report.

220. Dr. Hector moved, and it was unanimously resolved,—LXII. That the foregoing minutes be adopted as the Report of the Conference, and that the Chairman be requested to report them to the Government of Victoria, with a request that copies of them may be transmitted to the other colonies.

221. A vote of thanks to Mr. Ellery for his services as Chairman, and for the accommodation afforded to the Conference at the Observatory, was passed unanimously

The Conference then terminated.

APPENDIX No. 1.

METEOROLOGICAL STATIONS in New Zealand, New South Wales, South Australia, and Victoria, with Standard or Corrected Barometers, Thermometers, &c., at which complete and regular Observations are made.

NEW ZEALAND.

Stations.	South Latitude.	East Longitude.	Altitude above Sea.
	Deg. min.	Deg. min.	Feet.
Mongonui	35 1	173 28	70
Auckland	36 50	174 50	258
Taranaki	39 3	174 5	42
Napier	39 29	176 55	14
Wanganui	39 56	175 6	80
Wellington	41 16	174 47	140
Nelson	41 16	173 18	34
Cape Campbell	41 43	174 18	7
Christchurch	43 32	172 39	21
Bealey	43 2	171 31	2,104
Hokitika	42 41	170 59	12
Dunedin	45 52	170 31	550
Queenstown	45 2	168 39	1,070
Southland	46 17	168 20	79
Waitangi, Chatham Islands	43 55	176 42	100